

## CLAIMS

1. A pipe joint comprising: a cylindrical joint body having a first end on one side in an axial direction and a second end on the other side in the axial direction to be inserted into a joint mounting hole of a fluid pressure apparatus from a side of the first end; a tube connecting hole open on a side of the second end of the joint body; a chuck member provided in the joint body to be locked to a piping tube inserted into the tube connecting hole; a sealing member for sealing a periphery of the tube; a release member for releasing locking of the chuck member to the tube; and a pull-out preventing ring provided to an outer periphery of the joint body to prevent the joint body from being pulled out of the joint mounting hole,
- wherein the pull-out preventing ring is formed separately from the joint body, elastically deformable in a radial direction, and has on its outer peripheral face one or more annular edge to be locked to a hole wall of the joint mounting hole.
2. A pipe joint according to claim 1, wherein the annular edge(s) is(are) formed in a position close to an axial base end portion in the axial direction of the pull-out preventing ring with its(their) nose(s) directed toward the second end of the joint body.
3. A pipe joint according to claim 1, wherein the pull-out preventing ring has two annular edges in positions adjacent to

each other in an axial direction.

4. A pipe joint according to claim 3, wherein a space portion  
for housing a chip which has flaked away from the hole wall of  
5 the joint mounting hole is provided between the two annular edges .

5. A pipe joint according claim 1, wherein the pull-out  
preventing ring is in a split-ring shape having at a portion  
of a circumference thereof a split.

10

6. A pipe joint according to claim 1, wherein an angle of a  
section of the annular edge is  $90^{\circ}$  or smaller.

7. A pipe joint according to claim 1, wherein the pull-out  
15 preventing ring has two annular edges close to an axial direction  
base edge portion, and the annular edge(s) is(are) formed with  
its(their) nose(s) directed toward the second end of the joint  
body, having a space portion for housing a chip which has flaked  
away from the hole wall of the joint mounting hole provided between  
20 the two annular edges.

8. A pipe joint according to claim 1, wherein the pull-out  
preventing ring is fitted in a recessed portion formed on an  
outer periphery of the joint body with degrees of freedom in  
25 axial and radial directions.

9. A pipe joint according to claim 8, wherein the joint body

is formed of a first body portion on the side of the first end,  
a second body portion on the side of the second end, and an  
intermediate third body portion connecting both the body portions,  
the third body portion has a large diameter portion to be fitted  
5 over an outside of the first body portion, a small diameter portion  
to be fitted in the second body portion, and the recessed portion  
divided by the large diameter portion and the second body portion  
on an outer periphery of the small diameter portion, and the  
pull-out preventing ring is fitted in the recessed portion.

10

10. A pipe joint according to claim 9, wherein the annular  
edge(s) is(are) formed in a position close to an axial base end  
portion in the axial direction of the pull-out preventing ring  
with its(their) nose(s) directed toward the second end of the  
15 joint body.

11. A pipe joint according to claim 9, wherein the pull-out  
preventing ring has two annular edges in positions adjacent to  
each other in an axial direction.

20

12. A pipe joint according to claim 11, wherein a space portion  
for housing a chip which has flaked away from the hole wall of  
the joint mounting hole is provided between the two annular edges .

25 13. A pipe joint according claim 9, wherein the pull-out  
preventing ring is in a split-ring shape having at a portion  
of a circumference thereof a split.

14. A pipe joint according to claim 9, wherein the pull-out preventing ring has two annular edges close to an axial direction base edge portion, and the annular edge(s) is(are) formed with its(their) nose(s) directed toward the second end of the joint body, having a space portion for housing a chip which has flaked away from the hole wall of the joint mounting hole provided between the two annular edges.